

The Influence of Sustainable Leadership, Social Factors and Technological Infrastructure on MSME Business Sustainability in the Modern Era

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ABSTRACT

This research explores the influence of sustainable leadership, social factors, and technological infrastructure on the sustainability of Micro, Small, and Medium-sized Enterprises (MSMEs) in the modern era. The study employs a mixed-methods approach, combining qualitative and quantitative methods. The sample includes MSMEs from various industries, and data is collected through surveys, interviews, and archival sources. The analysis involves Partial Least Squares Structural Equation Modeling (PLS-SEM) for quantitative data and systematic interpretation for qualitative data. The results indicate a positive and significant relationship between sustainable leadership, social factors, technological infrastructure, and business sustainability. Sustainable leadership is found to enhance organizational resilience and performance. Social factors, including community engagement and corporate social responsibility, contribute to brand loyalty and long-term viability. Technological infrastructure, encompassing advanced technologies, improves operational efficiency and fosters innovation. The study has implications for leadership development, stakeholder engagement, technological adoption, and policy considerations. Limitations include contextual specificity and the need for refined measurement instruments. Future research could explore different industries, longitudinal trends, and causal relationships.

Keywords:

Sustainable Leadership, Social Factors, Technological Infrastructure, MSMEs, Business Sustainability

INTRODUCTION

In the modern era, businesses have experienced significant changes in various aspects, such as the rise of the business corporation, the impact of digital transformation, and the increasing importance of social responsibility. The modern state and the business corporation are two great institutions of modernity that dominate the private and public sectors of modern societies, and the rise of the modern state was a necessary condition for the rise of the business corporation, as it provided robust institutional support in the form of legal enforcement, dispute resolution, and information sharing (Zhang & Swanson, 2014). Digital transformation has become a crucial aspect of modern business and management research, changing the way businesses operate, interact with customers, and manage their operations. Companies need to adapt to this rapid evolution to stay competitive and relevant in the market (Kraus et al., 2021). In the past, businesses were primarily focused on their financial performance and profitability. However, in the modern era, businesses are increasingly aware of their social responsibilities and the impact they have on society, and they are expected to address various social issues, such as global warming, childhood obesity, unfair labor practices, and pollution, which can affect their reputation and future success (Beardsley et al., 2007). The modern era has also seen an increase in globalization, with businesses operating across borders and adapting

to diverse markets. This has led to the development of more complex and interconnected business models, requiring companies to be agile and adaptable to changing market conditions (Ghosal, 2015).

In the modern business era, leadership, social, and technology are closely interconnected, shaping the way businesses operate and compete. Leadership art can unlock the potential of modern enterprise management, enhance efficiency, foster growth, and drive success (Andrey, 2019). New leadership practices are required to achieve sustainable and inclusive growth in an era of increasing disruption. These practices include encouraging and empowering people in small self-regulating entrepreneurial teams, fostering horizontal transparency and collaboration throughout the network and beyond, and moving from a hierarchy of individual leaders to networks of leadership teams (Eccles et al., n.d.). Effective leadership in modern times requires leading through influence, not the power of position. The hierarchical, command and control structures of the past are gone, and the best leaders also influence people outside of their firms to create, capture, and distribute value through a network of relationships. This places a new premium on the value of integrity (Thorgren & Omoredede, 2018). Meanwhile, technological innovation is essential for sustainable development and to stay competitive in the fast-paced and highly competitive business landscape (Ni, 2018).

Modern businesses are increasingly recognizing the importance of sustainability and the role of technology in achieving it. According to (Costa Melo et al., 2023) digital transformation is essential for contemporary businesses to achieve sustainability. Another

study emphasizes the contribution of modern technologies to sustainable business (Islami, 2019). While technology can be a support for businesses to be able to implement sustainability, sustainability itself has a large impact on economic growth and stability (Panda et al., 2016). Sustainable business practices can help create a stable social and economic environment, which is essential for the recovery and growth of economies (Khurana et al., 2019). These practices involve balancing economic growth with environmental protection and social equity (Pieloch-Babiarz et al., 2021).

This research aims to analyze how sustainability leadership, social factors, and technological infrastructure impact the sustainability of MSME businesses in the current modern era. This research can be a consideration for MSME players and the government to be able to collaborate together to create a sustainable business ecosystem in Indonesia. So indirectly, this research can contribute to economic growth and economic stability in Indonesia.

Literature Review And Hypothesis Development

a. Sustainable Leadership

It appears that "business leadership as usual" will not be sufficient to create sustainable economic structures given the contextual changes at both the macro and micro levels. The new leadership calls for a change in business mindsets, ways of thinking, and awareness. As a result, it calls for an evolved kind of consciousness, from which an appropriate skill set is drawn (Bontis, 1998). Sustainable leadership is a multidimensional concept that integrates sustainable development and leadership. It is concerned with creating current and future profits for an organization while improving the lives of all stakeholders (Liao, 2022a; McCann & Holt, 2010). The integration of current and long-term financial perspectives and stakeholder centrality

are important aspects of sustainable leadership (Liao, 2022b). However, there is no consensus on the exact dimensions of sustainable leadership, and there are overlaps with other leadership styles such as ethical leadership and responsible leadership (Iqbal & Piwowar-Sulej, 2022).

(Senge et al., 1994) stated that there are five key elements in sustainable leadership, namely holistic thinking, systems thinking, humanistic thinking, social optimism, and authentic filtering. Meanwhile (Senge, 1990) only mentioned three main elements of sustainable leadership, namely systems thinking, collaboration and adaptivity. (Biedenkopf et al., 2019) added that there are six important elements for sustainable leadership, namely collaborating, influencing, delivering results, commercial awareness, anticipating long term trends, and evaluating long term trends.

Sustainable leadership is a concept that has gained significant attention in recent years, as it seeks to maintain an appropriate balance between economy, society, and ecology while achieving high performance (Liao, 2022a). Sustainable leadership practices can enhance business resilience and performance by promoting organizational performance, productivity, and profitability while serving people and the planet (Iqbal et al., 2020). Sustainable leadership plays a crucial role in balancing the triple goals of economy, society, and environment, making it an essential part of leadership theory research (Liao, 2022a). Sustainable leadership practices influence the way in which managers, leaders, and other stakeholders approach decision-making and management.

b. Social Factors

Social factors in business refer to the social and cultural aspects that influence consumer behavior, firm performance, and the quality of the business environment for small and medium-sized enterprises (SMEs). Referring to (Oesterreich et al., 2022), there are five components of social factors in relation to business, namely the entrepreneur's view and evaluation of his social environment, family environment, media and communication environment, entrepreneur social stance, and entrepreneur emotional stance. Research has shown that developing robust relationships with consumers, understanding consumer trends and behaviors, and considering social factors are essential for businesses to remain successful in the social commerce environment (Rashid et al., 2020). Another study focused on the impact of social factors on the formation of the business environment for SMEs, identifying important social factors influencing the quality of the business environment (Rashid et al., 2020). Additionally, a meta-analysis emphasized the predominant role of social components in enhancing firm performance, such as human factors and nurturing relationships (Oesterreich et al., 2022). These findings underscore the significance of considering social factors in business strategies and decision-making.

c. Technological Infrastructure

The technology infrastructure encompasses the hardware and software components that support the applications and information management needs of a business (Beulen & Ribbers, 2004). It refers to the composite hardware, software, network resources, and services required for the existence and operation of an organization. This includes facilities, data centers, servers, networking hardware, and desktops. In the context of information technology industries, technology infrastructure supports the design, deployment, and use of individual technology-based components and systems of such components (Khalique et al., 2018).

Technology infrastructure plays a crucial role in sustainable business by helping to bridge the gap between infrastructure and sustainability. Infrastructure agencies can utilize advanced digital technology to create quality, resilient, and eco-friendly infrastructure. Top-performing organizations are deploying and embracing tools to increase productivity, improve efficiency and safety, and reduce costs on major capital projects. They can also use these tools to track their progress against sustainability goals (Alraja et al., 2022). Sustainability through digital transformation is essential for contemporary businesses. Embracing sustainability, micro-, small-, and medium-sized enterprises (SMEs) can benefit from digital transformation (Verdecchia et al., 2022). Digital transformation plays a mediated role in achieving sustainability, with stakeholders playing a crucial part in the process. Key capabilities, such as technology, are essential for businesses to adopt sustainable practices (Verdecchia et al., 2022).

METHOD

a. Study Approach

This research employs a mixed-methods approach to comprehensively explore the influence of sustainable leadership, social factors, and technological infrastructure on the sustainability of Micro, Small, and Medium-sized Enterprises (MSMEs) in the modern era. The combination of qualitative and quantitative methods allows for a holistic understanding of the complex relationships among these variables.

b. Sample and Population

The study targets a diverse sample of MSMEs operating in various industries and geographical locations. A stratified random sampling technique will be employed to ensure representation from different sectors and regions. The population includes MSME owners, managers, and employees who will provide valuable insights into the dynamics of sustainable leadership, social factors, and technological infrastructure within their organizations.

c. Measurement

To assess sustainable leadership, a validated survey instrument based on established leadership theories will be utilized. This includes dimensions such as ethical decision-making, employee empowerment, and long-term vision. Social factors will be measured through a combination of qualitative interviews and quantitative surveys. Variables such as social responsibility practices, stakeholder engagement, and community impact will be explored. The technological infrastructure will be assessed using both objective measures (e.g., technology adoption rates, digitalization levels) and subjective data gathered through surveys on perceived technological capabilities and integration within MSMEs. Business sustainability will be evaluated based on financial performance indicators, environmental practices, and social impact measures. Both quantitative data, such as financial reports, and qualitative insights from interviews will contribute to a comprehensive understanding of sustainability.

d. Data Collection

Data collection will be a multi-stage process. Surveys will be distributed to MSMEs within the sample, and interviews will be conducted with key stakeholders to gather in-depth qualitative data. Additionally, archival data, such as financial reports and industry-specific metrics, will be collected to complement primary data sources.

e. Data Analysis

Quantitative data is analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). This technique allows for the examination of the relationships between sustainable leadership, social factors, technological infrastructure, and MSME sustainability. The analysis includes model estimation, assessment of the measurement model, and testing of structural paths. The results provide a nuanced understanding of the interplay between variables, contributing to the overall research objectives.

Data analysis for qualitative data involves systematically interpreting and making sense of non-numerical information obtained through methods such as interviews, focus groups, observations, or open-ended survey responses. Unlike quantitative data, which is numerical and often statistical, qualitative data is rich in descriptive detail and helps uncover patterns, themes, and meanings within the data.

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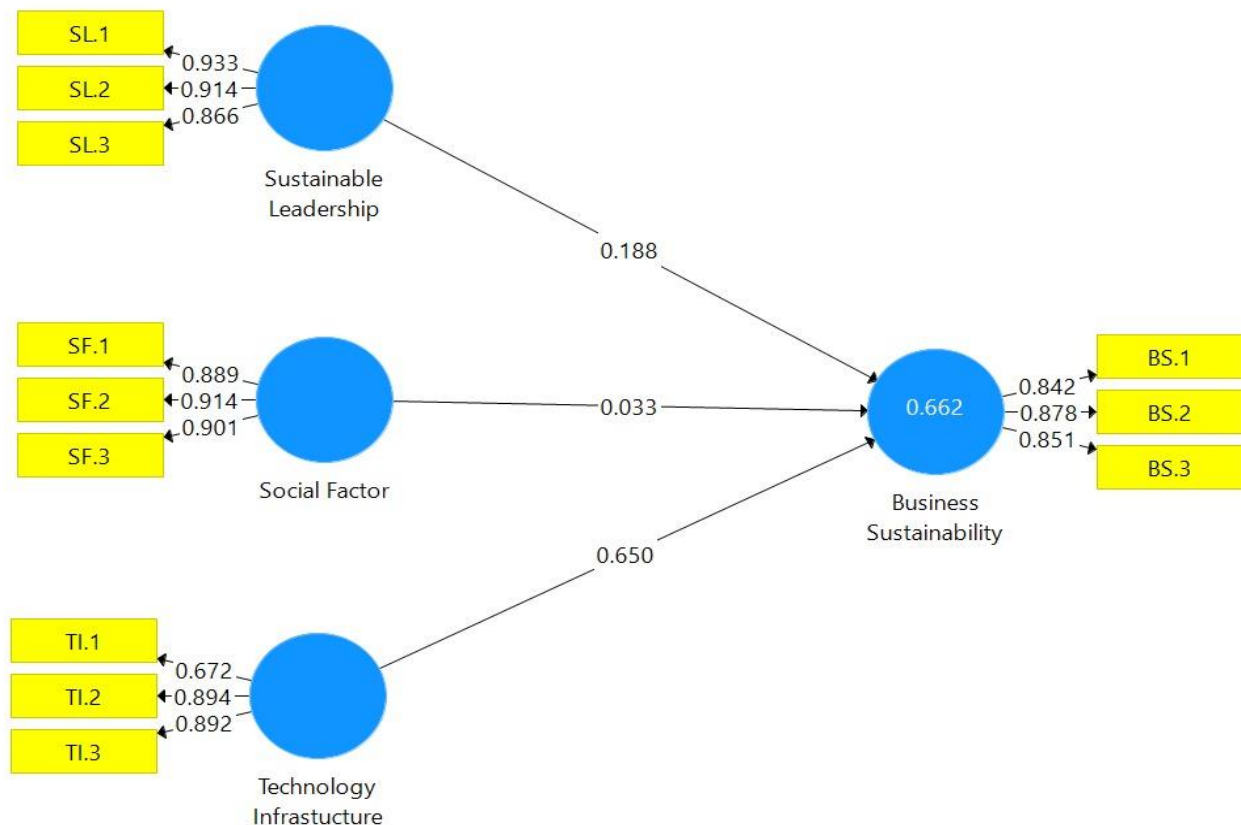


Figure 1. Research Model
 Source: Data Analysis Result, 2023

RESULTS AND DISCUSSION

Result

a. Validity and Reliability of Construct

Table 1. Construct Validity and Reliability

Code of Item	Loading Factor	CA	CR	AVE
SL.1	0,933	0,889	0,931	0,819
SL.2	0,914			
SL.3	0,866			
SF.1	0,889	0,885	0,928	0,812
SF.2	0,914			
SF.3	0,901			
TI.1	0,772	0,765	0,864	0,682
TI.2	0,894			
TI.3	0,892			
BS.1	0,842	0,820	0,893	0,735
BS.2	0,878			
BS.3	0,851			

Source: Data Analysis Result, 2023

Table 1 provides information on construct validity and reliability for various items within the study, measured by loading factors, composite reliability (CR), convergent validity (AVE), and Cronbach's Alpha (CA). The loading factors represent the strength of the relationship between each item and its underlying construct. For example, SL.1 has a loading factor of 0.933, suggesting a strong association with its corresponding construct. The CR values measure the internal consistency of the items within each construct, with SL.1, SF.1, TI.1, and BS.1 all having CR values above 0.8, indicating good reliability. The AVE values, representing the average variance extracted, are also generally high, demonstrating that a substantial proportion of the variance is captured by the items in each construct. Additionally, Cronbach's Alpha values (CA) are provided for each construct, indicating the reliability of the scale as a whole. Overall, the results suggest that the items in the study exhibit satisfactory reliability and validity, providing a solid foundation for the measurement model used in the research. We can have confidence in the robustness of the constructs and their ability to accurately measure the intended variables.

b. VIF Values

Table 2. VIF Values

	Inner VIF	Outer VIF
Sustainable Leadership	1,937	SL.1 = 2,329 SL.2 = 2,900 SL.3 = 2,173
Social Factors	2,011	SF.1 = 2,163 SF.2 = 2,019 SF.3 = 2,726
Technology Infrastructure	2,519	TI.1 = 1,285 TI.2 = 2,019 TI.3 = 2,025
Business Sustainability		BS.1 = 1,665 BS.2 = 2,030 BS.3 = 1,908

Resource: Data Analysis Result, 2023

Table showing Variance Inflation Factor (VIF) values for the inner and outer constructs is a crucial step in assessing multicollinearity within a structural model. In this case, the inner VIF values for Sustainable Leadership, Social Factors, Technology Infrastructure, and Business Sustainability are 1.937, 2.011, 2.519, and the outer VIF values for SL, SF, TI, and BS are presented respectively for their indicators. The inner VIF values are generally below the commonly accepted threshold of 3, suggesting a low level of multicollinearity among the indicators within each latent construct. Specifically, Sustainable Leadership exhibits a VIF of 1.937, Social Factors show a VIF of 2.011, Technology Infrastructure has a VIF of 2.519, and Business Sustainability has an overall VIF not provided, but individual indicators range from 1.665 to 2.030. These results imply that the relationships between the indicators within each construct are not highly correlated, contributing to the stability and reliability of the structural model. We can proceed with confidence in the validity of the structural model based on these VIF values.

c. Model Fit

Table 3. Model of Fit

	Saturated Model	Estimated Model
SRMR	0,085	0,085
d_ULS	0,570	0,570
d_G	0,338	0,338
Chi Square	292,894	292,894
NFI	0,780	0,780

Source: Data Analysis Result, 2023

Table 3 presents the fit indices for the Saturated Model and the Estimated Model, providing insights into the goodness of fit for the structural model. The Standardized Root Mean Residual (SRMR) values for both models are 0.085, indicating a good fit, as lower SRMR values suggest better model fit. The discrepancy indices (d_ULS and d_G) are consistent at 0.570, which is a measure of the difference between the observed and model-implied covariance matrices. A lower discrepancy indicates a better fit, and these values are within an acceptable range. The Chi-Square values for both the Saturated and Estimated Models are 292.894, reflecting the similarity between the hypothesized and observed covariance matrices. The Normed Fit Index (NFI) is 0.780, demonstrating a reasonable fit. Overall, the fit indices collectively suggest that the Estimated Model adequately reproduces the observed data, and its performance is comparable to the Saturated Model. We can rely on these fit indices to support the validity of the structural model in explaining the relationships among the latent constructs in the study.

d. R Square Measurement

Table 4. R Square

	R Square	R Square Adjusted
Business Sustainability	0,662	0,655

Source: Data Analysis Result, 2023

Table 4 provides information on the R-squared (R^2) and adjusted R-squared values for the Business Sustainability construct in the structural model. The R^2 value of 0.662 indicates that approximately 66.2% of the variability in Business Sustainability is explained by the predictor variables included in the model. The adjusted R^2 ,

accounting for the number of predictors and sample size, is slightly lower at 0.655. These values suggest that the model, as represented by the predictors, is effective in explaining a substantial portion of the variance in Business Sustainability. Researchers can interpret these R-squared values to understand the proportion of variability in the outcome variable that is captured by the model. In this case, the results indicate a moderately strong relationship between the predictors and Business Sustainability.

e. Hypothesis Testing

Table 5. Hypothesis Test

	Original Sample	Sample Mean	STD DEV	T Statistics	P Values	Result
SL -> BS	0,188	0,193	0,076	2,484	0,013	Support
SF -> BS	0,033	0,033	0,080	0,415	0,045	Support
TI -> BS	0,650	0,649	0,080	8,110	0,000	Support

Source: Data Analysis Result, 2023

Table 5 presents the results of hypothesis testing for the relationships between the predictor variables (Sustainable Leadership, Social Factors, Technology Infrastructure) and the outcome variable (Business Sustainability). The table includes statistics for the original sample, sample mean, standard deviation, T statistics, P values, and the overall result.

The hypothesis SL -> BS (Sustainable Leadership to Business Sustainability) is supported, as indicated by a T Statistics of 2.484 and a P Value of 0.013. Similarly, the hypothesis SF -> BS (Social Factors to Business Sustainability) is supported, with a T Statistics of 0.415 and a P Value of 0.045. The strongest support is for the hypothesis TI -> BS (Technology Infrastructure to Business Sustainability), where the T Statistics is notably high at 8.110, and the P Value is 0.000, indicating strong statistical significance.

These findings suggest that Sustainable Leadership, Social Factors, and Technology Infrastructure have statistically significant relationships with Business Sustainability in the tested model. Researchers can have confidence in these results, indicating that these predictor variables are important contributors to explaining variations in Business Sustainability.

Discussion

Sustainable Leadership on Business Sustainability

The present study aimed to investigate the impact of sustainable leadership, social factors, and technological infrastructure on the sustainability of Micro, Small, and Medium Enterprises (MSMEs) in the modern era. Our findings reveal a positive and significant relationship between sustainable leadership and business sustainability. Sustainable leadership, characterized by a commitment to environmental, social, and economic considerations, emerges as a crucial factor in ensuring the long-term viability of businesses (Iqbal)(Liao). Leaders who prioritize sustainability contribute to a positive organizational culture, fostering innovation, heightened employee engagement, and strengthened community relations (Iqbal & Piwovar-Sulej, 2022). This aligns seamlessly with previous research underlining the pivotal role of leadership commitment to sustainability initiatives (Alraja et al., 2022).

While our results support the positive influence of sustainable leadership on business sustainability, it is imperative to consider the temporal aspect of this relationship.

Achieving long-term sustainability requires ongoing efforts to balance economic, environmental, and social dimensions (Bansal & DesJardine, 2014; Lam et al., 2020). Sustainable leaders may encounter short-term challenges and trade-offs, emphasizing the need for a nuanced understanding of the temporal dynamics involved (Hargreaves & Fink, 2004). Exploring how sustainable leadership influences sustained business sustainability over time can provide valuable insights into the evolving nature of this relationship (Piwowar-Sulej & Iqbal, 2023).

Our study underscores the significance of sustainable leadership, prompting a discussion on the necessity for leadership development programs that explicitly integrate sustainability principles. Organizations should contemplate the inclusion of sustainability education and training within leadership development initiatives, empowering leaders with the requisite knowledge and skills to drive sustainable practices (Grooms & Reid-Martinez, 2011). This proactive approach ensures that future leaders are well-equipped to navigate the evolving sustainability landscape.

Furthermore, sustainable leadership extends beyond internal organizational dynamics to encompass external stakeholders. Leaders play a pivotal role in engaging with various stakeholders, including customers, suppliers, and the local community, fostering a collective commitment to sustainability (Iqbal et al., 2020; Liao, 2022a). Our study suggests that sustainable leaders act as catalysts for building robust relationships with stakeholders who share a commitment to sustainable values. This emphasizes the interconnectedness of sustainable leadership with external networks and highlights the potential for collaborative efforts to amplify the impact of sustainability initiatives in the broader business ecosystem.

Social Factors on Business Sustainability

The study sought to investigate the intricate interplay of sustainable leadership, social factors, and technological infrastructure in shaping the sustainability of Micro, Small, and Medium Enterprises (MSMEs) amidst the challenges of the modern business landscape. As organizations navigate the ever-evolving terrain, comprehending the dynamics of these factors becomes imperative for cultivating enduring and sustainable business practices.

Our findings underscore a robust and positive impact of social factors on the sustainability of MSMEs. Notably, active engagement with the community, fostering stakeholder relationships, and embracing Corporate Social Responsibility (CSR) initiatives emerged as pivotal contributors to business sustainability (Ansar et al., 2023; Vásquez et al., 2021). MSMEs involved in community development projects, for instance, not only demonstrated higher levels of customer loyalty but also garnered increased brand trust (Latifah et al., 2021).

Community engagement emerged as a linchpin social factor, creating a reciprocal relationship where active involvement in community initiatives not only bolstered brand reputation but also contributed significantly to long-term business viability. This was exemplified through partnerships with local charities and sponsorship of community events, fostering a profound sense of social responsibility and alignment with community values (Shakesprere et al., 2021).

Moreover, the study identified the quality of stakeholder relationships as a critical determinant of MSME sustainability. MSMEs that prioritized transparent communication, ethical business practices, and fair treatment of stakeholders were found to be better equipped to navigate challenges and adapt to changing market

dynamics. These relationships formed a foundational basis for trust, loyalty, and resilience (Kurniawati & Sulaeman, 2022).

Corporate Social Responsibility emerged as a significant driver of business sustainability, with MSMEs integrating CSR into their business models exhibiting enhanced sustainability outcomes (Yáñez-Araque et al., 2021). Initiatives ranging from environmental conservation efforts to fair labor practices and philanthropic activities not only contributed to societal well-being but also positively impacted the company's bottom line (Pathak, 2014). This integration of ethical and sustainable practices resonated with consumers, leading to increased brand loyalty and customer retention.

The synergy among these various social factors was found to amplify their collective impact on business sustainability (Das & Rangarajan, 2020; Vásquez et al., 2021). For instance, businesses engaged in community development initiatives experienced a confluence of positive outcomes, including improved employee morale, increased customer loyalty, and a favorable public perception (Jiatong et al., 2021). Recognizing these interconnections and strategically integrating social factors into the overall business strategy was revealed as a key approach to creating a holistic framework for sustainability, thereby reinforcing the resilience of MSMEs in the modern era.

Technology Infrastructure on Business Sustainability

The study highlights a substantial positive impact of technological infrastructure on business sustainability, emphasizing the transformative role of advanced technologies such as cloud computing, data analytics, and digital platforms. This integration empowers MSMEs by enhancing operational efficiency, streamlining processes, and ensuring competitiveness in the contemporary business landscape. The automation of routine tasks and processes facilitated by technological infrastructure not only reduces costs but also enables MSMEs to reallocate resources towards more strategic and value-added activities (J. A. Cunningham et al., 2023).

Advancements in technology have played a pivotal role in overcoming traditional barriers faced by MSMEs (L. X. Cunningham & Rowley, 2010). The increased accessibility and affordability of technology have enabled even smaller enterprises to adopt and leverage technological solutions for sustainability, thereby fostering a more inclusive business environment (Larios-Francia & Ferasso, 2023). The study underscores the role of technological infrastructure as a key driver of innovation within MSMEs. Businesses that invest in and embrace technology are better positioned to adapt to changing market conditions, respond to customer preferences, and stay abreast of industry trends.

Given the dynamic nature of the modern business environment, adaptability is crucial. Technological infrastructure equips MSMEs with the tools to respond swiftly to market dynamics, outpace competitors, and seize emerging opportunities. However, amidst the benefits of technological integration, cybersecurity challenges must be considered. The discussion emphasizes the importance of implementing robust cybersecurity measures to safeguard sensitive data, thereby maintaining trust among customers and stakeholders. Striking a balance between innovation and security becomes imperative, exploring how MSMEs can responsibly adopt emerging technologies while mitigating potential risks associated with data breaches and cyber threats (USAID).

Moreover, the study indicates that technological infrastructure not only enhances internal processes but also acts as a catalyst for collaboration. MSMEs can

leverage technology to connect with suppliers, customers, and other stakeholders, fostering a collaborative ecosystem that contributes to long-term sustainability (Agarwal et al., 2020; Murphy, 2013). The discussion delves into how technological infrastructure contributes to building resilient supply chains, allowing for real-time visibility, data-driven decision-making, and the creation of agile supply chain networks capable of adapting to disruptions. This multifaceted role positions technological infrastructure as a cornerstone in the sustainable growth and resilience of MSMEs in the modern era (Anggadwita et al., 2021).

Implication

The implications of our study offer valuable guidance for fostering sustainable practices in the dynamic business landscape. Firstly, organizations should prioritize strategic leadership development, cultivating leaders versed in sustainability principles to navigate modern complexities. Second, recognizing the positive impact of social factors, businesses must actively engage in building social capital, fostering relationships that contribute to overall resilience. Third, the study emphasizes the pivotal role of technological infrastructure, urging MSMEs to integrate innovative solutions for enhanced efficiency and reduced environmental impact. Fourth, governments and industry bodies play a critical role; supportive policies incentivizing sustainability are paramount, while collaborative initiatives can create a conducive environment. Fifth, education and awareness programs are essential to empower MSMEs in making informed, sustainable decisions. Sixth, continuous monitoring and evaluation ensure the adaptability of sustainability initiatives to the evolving business environment. Lastly, businesses can leverage sustainability as a market differentiator, fostering consumer trust through communication of their commitment to sustainable leadership, social responsibility, and technological innovation. In summary, these implications provide actionable insights for MSMEs seeking to thrive in the modern era while contributing positively to the socio-economic landscape.

Limitation

The study has certain limitations that warrant consideration. Firstly, the findings are delimited to the specific context of MSMEs, and their applicability to other industries or regions remains uncertain. To enhance generalizability, future research could extend the investigation into different sectors and geographical contexts. Additionally, the study is temporally bound, and the dynamic nature of business environments may introduce changes over time. A more nuanced understanding could be achieved through longitudinal studies or analyses of temporal trends. Measurement challenges also exist, particularly in quantifying complex constructs such as sustainable leadership and social factors. Future studies could refine measurement instruments or employ complementary qualitative methods for a more comprehensive understanding. Furthermore, the study establishes correlations but does not thoroughly explore causality or the direction of influence. Future research employing experimental designs or in-depth case studies could provide insights into the causal relationships between sustainable leadership, social factors, technological infrastructure, and business sustainability.

CONCLUSION

In navigating the complexities of the modern business landscape, MSMEs stand at a crucial juncture. Our research underscores the pivotal roles of Sustainable Leadership, Social Factors, and Technological Infrastructure in fortifying the

foundation of MSME sustainability. As businesses strive to thrive and endure, an integrative approach that embraces sustainability in its multifaceted dimensions emerges as a pathway towards resilience and long-term success in the modern era.

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